



PATENT  
0933-0148P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Aristos ARISTIDOU et al. Conf.: 6884  
Appl. No.: 09/423,554 Group: 1652  
Filed: November 10, 1999 Examiner: WALICKA, M.  
For: TRANSFORMED MICROORGANISMS WITH  
IMPROVED PROPERTIES

INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION AFTER FILING OF AN APPLICATION  
BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE  
OR CONCURRENTLY WITH A RULE 1.114 RCE APPLICATION)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NOV - 5 2003

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-1449(s), attached hereto.

II. COPIES (check at least one box)

- a. ☒ This application was filed before June 30, 2003. Accordingly, submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- b. ☐ This application was filed on or after June 30, 2003. Accordingly, copies of cited U.S. patents and patent application publications therefore are not included. Copies of foreign patent documents and non-patent literature are included.

- c. ☐ Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE  
(check at least one box)

- a. ☒ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The patents, publications, or other information listed on the attached PTO 1449 are in the English language and therefore, do not require a statement of relevancy.

- b. ☒ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

A partial English translation of "Berichte des forschungszentrums Julich" reference is attached.

- c. ☒ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

- d. ☐ **OTHER**

The following additional information is provided for the Examiner's consideration.

FEES

IV. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b):  
(check one box)

- a. ☐ within three months of the filing date of a national application (37 C.F.R. § 1.97(b)(1)). No fee or statement is required. (This section is not to be used with RCE's.)
- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or statement is required.
- c. ☒ concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.
- d. ☐ before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or statement is required.  
In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the statement under 37 C.F.R. § 1.97(e) below, or, if no statement has been made, charge our deposit account in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):  
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c)(1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c)(2)).

- a. ☐ No statement; therefore, a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).  
or
- b. ☐ See the statement below. No fee is required.

VI. STATEMENT UNDER 37 C.F.R. § 1.97(e) (check only one box)

The undersigned hereby states that

- a. ☐ each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the IDS.
- c. ☐ Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

VII. PAYMENT OF FEES (check one box)

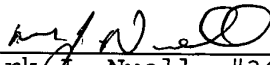
- ☐ A check in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p) is enclosed for the above-identified fee.
- ☐ Please charge Deposit Account No. 02-2448 in the amount required by 37 C.F.R. § 1.17(p) for the above-indicated fee. A triplicate copy of this paper is attached.
- ☒ No fee is required.


If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Mark J. Nuell, #36,623

  
DRN/TBS/mua  
0933-0148P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachment(s): ☒ PTO-1449  
☒ Documents  
☒ Foreign Search Report  
☐ Fee  
☐ Other:

(Rev. 09/30/03)



Form PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**

(Use several sheets if necessary)

ATTY. DOCKET NO.  
0933-0148PAPPLICATION NO.  
09/423,554APPLICANT  
Aristos ARISTIDOU et al.FILING DATE  
November 10, 1999GROUP  
1652**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	US						
	US						
	US						
	US						
	US						

**FOREIGN PATENT DOCUMENTS**

	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO

**OTHER DOCUMENTS**

(Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.

	J. HALLBORN et al., Microbiol. Biotechnol 1994, Vol. 42, pp. 326-333.
	A. MARX, Berichte des Forschungszentrums Julich (Juel-3459), 1997, pp. 1-111.
	S. SUYE, Recent Res. Devel. in Fermentation and Bioeng., 1998, pp. 55-64.
	BAGGIO et al., (Abstract) Journal of Bacteriology (1996 Dec) 178 (24) 7212-20.
	SCHAAP et al., (Abstract) Molecular and General Genetics (1996 Feb 25) 250 (3) 339-47.
	ZHANG et al., (Abstract) Journal of Bacteriology (1996 Jan) 178 (2) 490-5.
	SAMUELSON et al., (Abstract) Archives of Medical Research (1992) 23 (2) 31-3.
	CANNIO et al., (Abstract) Journal of Bacteriology (1996 Jan) 178 (1) 301-5.
	LI et al., (Abstract) Journal of Bacteriology (1997 July) 179 (13) 4433-7.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DRN/TBS/mua



Form PTO-1449				ATTY. DOCKET NO. 0933-0148P		APPLICATION NO. 09/423,554			
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)				APPLICANT Aristos ARISTIDOU et al.					
				FILING DATE November 10, 1999		GROUP 1652			
<b>U.S. PATENT DOCUMENTS</b>									
EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
	US								
	US								
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	US								
	US								
<b>FOREIGN PATENT DOCUMENTS</b>									
	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
<b>OTHER DOCUMENTS</b> (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.									
	KIM et al., (Abstract) Plant Molecular Biology (1994 Dec) 26 (6) 1833-41.								
	ADDIS et al., (Abstract) Microbial Pathogenesis (1997 July) 23 (1) 55-61.								
	ANSELL et al, (Abstract) EMBO Journal (1997 May 1) 16 (9) 2179-87.								
	VALVERDE et al., (Abstract) Journal of Bacteriology (1997 July) 179 (14) 4513-22.								
	TAMOI et al., (Abstract ) Biochemical Journal (1996 Jun 1) 316 (Pt 2) 685-90.								
	Protein Sequence of D-xylose 1-dehydrogenase, Gene 162 (1), 93-97 (1995).								
	Protein Sequence of Orotate reductase, Curr. Genet. 30 (2), 159-165 (1996).								
	ISAS et al., (Abstract) Journal of Biological Chemistry (1995 Sep 8) 270 (36) 21258-63.								
EXAMINER					DATE CONSIDERED				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									



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SAAPUNUT

05. 05. 2003

Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

Generaldirektion 2

Directorate General 2

Direction Générale 2

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(Formalities and other matters)



Application No. 99 907 641.7-2401	Ref. 31535	Date 30.04.2003
Applicant VALTION TEKNILLINEN TUTKIMUSKESKUS		

Communication pursuant to Article 96(2) EPC

30. 8. 03 PW  
(+ 30. 7. 03) +  
taul

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



MANDL B  
Primary Examiner  
for the Examining Division

Enclosure(s): 4 page/s reasons (Form 2906)  
D1: APPL. MICROB.. BIOT. 42:326 ; D2: MICROB. 142:165;  
D3: BER. FORSCH.ZENTR. JÜLICH 1997; D4: REC. RES. DEVEL. FERM.&BIOENG.

Registered Letter

EPO Form 2001 07.02CSX



**Bescheid/Protokoll (Anlage)**

Datum  
Date 30.04.2003  
Date

**Communication/Minutes (Annex)**

Blatt  
Sheet 1  
Feuille

**Notification/Procès-verbal (Annexe)**

Anmelde-Nr.:  
Application No.: 99 907 641.7  
Demande n°:

The examination is being carried out on the following application documents:

Text for the Contracting States:

AT BE CH LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

**Description, pages:**

1-60 as published

**Claims, No.:**

1-38 as published

**Drawings, sheets:**

1/16-16/16 as published

1) The following documents (**D1-D4**) are cited by the examiner (see the Guidelines, C-VI, 8.9). Copies of the documents are annexed to the communication and the numbering will be adhered to in the rest of the procedure:

**D1:** Hallborn J. et al., APPL. MICROBIOL. BIOTECHNOL 1994, 42:326-333:

The influence of cosubstrate and aeration on xylitol formation by recombinant *Saccharomyces cerevisiae* expressing the XYL1 gene.

**D2:** Meinander N. et al., MICROBIOLOGY 1996, 142: 165-172: A heterologous

reductase affects the redox balance of recombinant *Saccharomyces cerevisiae*.

**D3:** Marx A., BERICHTE DES FORSCHUNGSZENTRUMS JÜLICH

(JUEL-3459), 1997, pages 1-111: Bestimmung des Kohlenstoffflusses im Zentralstoffwechsel von *Corynebacterium glutamicum* mittels <sup>13</sup>C-Isotopenanalyse.

**D4:** Shin-ichiro Suye, RECENT RES. DEVEL. IN FERMENTATION &

BIOENG., 1998, 1:55-64: Coenzyme regeneration with malic enzyme reaction system.